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EFFECT OF PERFLUOROOCCTANOIC ACID TREATMENT ON PROLIFERATIVE CHARACTERISTICS OF AORTA IN MICE

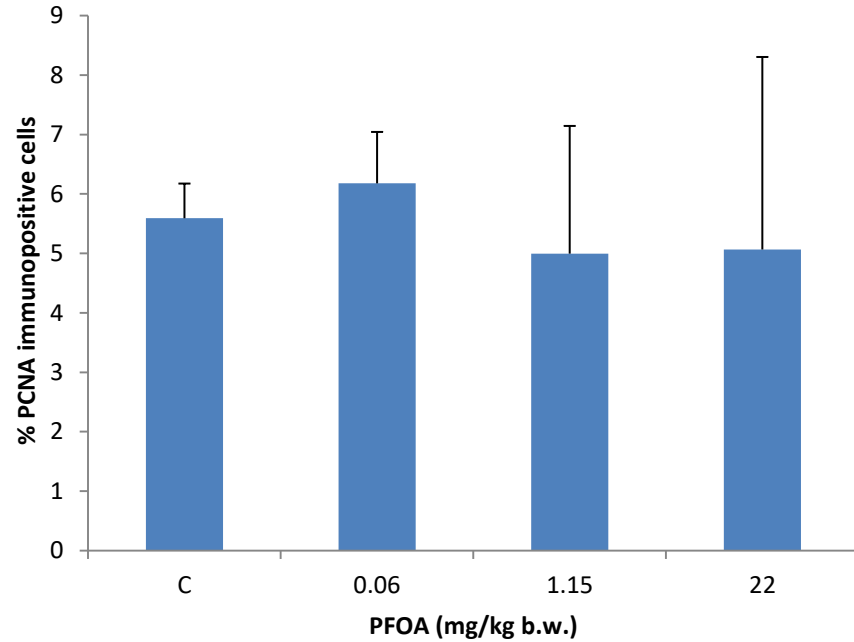
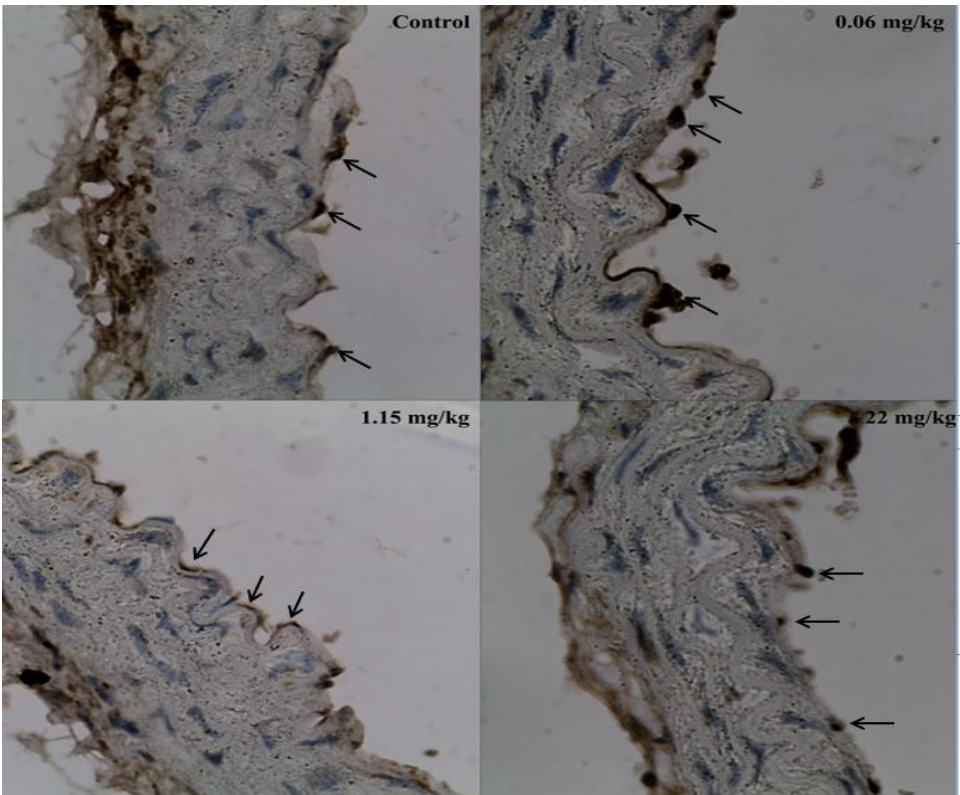


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Materials and methods

- Female Swiss mice were subacutely (two weeks) treated with 0.06, 1.15 and 22 mg/kg body weight (b.w.) of PFOA.
- Formalin-fixed paraffin-embedded aortic tissue was cut into 5 μm thick sections and immunostained with anti-proliferating cell nuclear antigen (PCNA) antibody.
- Using a light microscope the total number of aortic cells (both PCNA-positive and PCNA-negative nuclei) and the number of PCNA-positive nuclei were counted.
- The proliferative index of aortic cells was calculated as a percentage using the formula: proliferative index (%) = (number of PCNA-positive cells / total number of cells) x 100.
- Statistical analysis was performed by the Statistica® software using one-way analysis of variance (ANOVA) followed by Dunnett's post hoc test.

Representative PCNA IHC-stained aortic sections



Arrows indicate representative PCNA-positive cells.

Discussion

- Proliferative indexes of PFOA-treated groups did not statistically differ from the control group.
- Within the framework of this experimental setup PFOA does not influence the proliferation rate of aortic cells.



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